

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claims 1-5, 8 and 10 are amended to correct formal matters, and at least Figures 1-3 and the description of those figures in the present application further support the amendments. New claim 11 has been added and is supported by at least Figures 1-8 of the present application.

Interview Summary

Applicants' representative Joshua Randall (Reg. No. 50,719) and Examiner Koppikar conducted a phone interview on August 5, 2003. After a discussion of the cited references, the Examiner indicated that the cited references probably did not disclose being open at a circumference of the master disc, as required by the pending claims, although further search and consideration may be required. The Examiner also indicated that he would issue a new 35 U.S. C. §112 rejection in another non-final Office Action.

Claim Objections

Claims 1-10 were objected to for several informalities. The term "magnetic disc" has been replaced with the term "slave disc" throughout the claims as suggested by the Examiner to avoid confusing the master disc with the slave disc, since the master disc is also technically a magnetic disc. The Examiner also suggested changing the preamble of the claim so that it reads "a master disc in contact with a slave disc." Applicants respectfully disagree with this suggestion. Although many of the master disc limitations of claim 1 are described with reference to a slave disc, the claimed features are directed to the master disc, not a slave disc. Therefore, the preamble should not recite a master and slave disc combination.

§112 Rejections

Claims 1-9 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1-3 have been amended to replace the phrase "peripheral end portion" with the term "circumference" for describing that part of the magnetic disc that is open to air. Applicants submit that claims 1-9 are definite.

§102 Rejections

Claims 1, 3, 6 and 7 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. 6,347,016 (Ishida). Applicants respectfully traverse this rejection.

Ishida fails to disclose a master disc that includes "a space surrounded by a surface of a slave disc positioned on the principal surface and the concave portion is open to air at a circumference of a slave disc positioned on the principal surface" of the master disc when "the master disc is closely contacting a slave disc," as required by claim 1. Ishida discloses in Figure 19a a master disc that includes an area 193 (shown in hatching) that is lower than the ring 191 at an outer circumference of the disc, areas 192 where the embossed pattern is formed, and markers 194. Therefore, if a slave disc were brought into contact with this surface of the master disc, the lowered area 193 would not be "open to air at a circumference of a slave disc" because of ring 191. Figure 16 of Ishida illustrates a master and slave disc configuration wherein the master disc and slave disc are not yet in close contact with each other. Therefore, the open space between the master and slave discs at the circumference of the slave disc is due to separation of the discs. Once the master and slave discs are brought into close contact with each other, the open space at the circumference of the slave disc would be eliminated. Therefore, Applicants submit that Ishida fails to disclose every limitation of claim 1, and the claims that depend from it.

Claim 10 was rejected under 35 U.S.C. § 102(e) as being anticipated by Ishida. Applicants respectfully traverse this rejection. As discussed above, Ishida fails to disclose every limitation of claim 1. Therefore, claim 10 is allowable for at least the reason it is dependent upon an allowable base claim. Applicants do not concede the correctness of this rejection.

§103 Rejections

Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida. Applicants respectfully traverse this rejection. As discussed above, Ishida fails to disclose every limitation of claim 1. Applicants further submit that Ishida fails to disclose or suggest in any way "a space surrounded by a surface of a slave disc . . . and the concave portion is open to air at a circumference of a slave disc," as required by claim 1. Therefore, claims 2 and 4 are allowable

for at least the reason they depend from claim 1. Applicants do not concede the correctness of this rejection.

Claims 1, 3 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 11-273069 ("JP '069") in view of JP 11-025455 ("JP '455"). Applicants respectfully traverse this rejection.

The master discs disclosed by JP '455 and JP '069 fail to disclose or suggest "a space surrounded by a surface of a slave disc positioned on the principal surface [of the master disc] and the concave portion is open to air at a circumference of a slave disc positioned on the principal surface," as required by claim 1.

JP '455 discloses a configuration in which a slave drive disc and the master disc are stacked in close contact with each other, and a space between a concave portion of the disc and a surface of the slave disc is not open to air at a circumference of the master disc. Figures 2 and 4 show the master disc 1 spaced apart from slave disc 11, thereby giving the appearance that there is an opening between the master and slave disc at a circumference of the slave disc. However, as shown in Figure 3, when the master and slave discs are "closely contacting" each other, the open areas 4 in the master disc are not open at a circumference of the slave disc. Furthermore, JP '455 fails to disclose concave portions that are distinct from radial land portions and arrays of ferromagnetic film that are formed on the land portions.

JP '069 discloses in Figures 6 and 10 (described in paragraphs [0026] and [0031] – an English translation of which was submitted previously) a state before the master and a slave disc are brought in close contact with each other. Thus, Figures 6 and 10 give the appearance that a space is open to air at a circumference of the master disc. However, if the master and slave discs were brought in close contact with each other, there is no structure on the master disc that would provide "a space . . . open to air at a circumference of a slave disc," because there are no separate concave portions and radial land portions formed in the master disc that would provide such an open space.

JP '069 discloses in Figures 4 and 9 that regions 41, 91 are not radial land portions or concave portions, but are merely fine projections and recesses corresponding to a preformat

information signal ferromagnetic material thin films. The ferromagnetic thin film is made of a ferromagnetic material such as Co (see paragraph [0039]), and corresponds to the "array of ferromagnetic films" that are formed on the "radial land portions" required by claim 1. Further, neither JP '069 nor JP '455 provide any disclosure or suggestion of forming separate concave portions in the master disc thereby defining the radial land portions required by claim 1. Therefore, JP '069 and JP '455 fail to disclose or suggest every limitation of claim 1, and the claims that depend from it.

Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '069 in view of JP '455. As discussed above, JP '069 and JP '455 fail to disclose or suggest every limitation of claim 1. Therefore, claim 10 is allowable for at least the reason it is dependent upon an allowable base claim. Applicants do not concede the correctness of this rejection.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida and further in view of U.S. 5,800,253 (Ikemoto). Applicants respectfully traverse this rejection. As discussed above, Ishida fails to disclose or suggest every limitation of claim 1. Ikemoto fails to remedy the deficiencies of Ishida as it relates to claim 1. Therefore, claim 8 is allowable for at least the reason it is dependent upon an allowable base claim. Applicants do not concede the correctness of this rejection.

New Claim


New claim 11 has been added as a combination master and slave disc apparatus claim. Applicants submit that the art of record fails to disclose the limitations of new claim 11 for similar discussed above related to claim 1. Consideration and allowance of new claim 11 is respectfully requested.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,

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Date: November 12, 2003



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